DOCUMENT RESUME

ED 459 969 RC 023 262

AUTHOR	Howley, Aimee; Howley, Craig
TITLE	Rural School Busing. ERIC Digest.
INSTITUTION	ERIC Clearinghouse on Rural Education and Small Schools, Charleston, WV.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO	EDO-RC-01-7
PUB DATE	2001-12-00
NOTE	4p.
CONTRACT	ED-99-CO-0027
AVAILABLE FROM	ERIC/CRESS, P.O. Box 1348, Charleston, WV 25325. Tel 800-624-9120 (Toll Free). For full text: http://www.ael.org/eric/digests/edorc01-7.htm.
PUB TYPE	ERIC Publications (071) -- ERIC Digests in Full Text (073)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Academic Achievement; *Bus Transportation; *Consolidated Schools; Disadvantaged Youth; Elementary Secondary Education; Poverty Areas; *Rural Schools; School Districts; Socioeconomic Status; *Student Transportation
IDENTIFIERS	ERIC Digests; *Home School Proximity; Rural Suburban Differences

ABSTRACT

This digest summarizes information suggesting that long bus rides are part of the hidden costs of school and district consolidation. Rural school districts spend more than twice per pupil what urban districts spend on transportation. A review of studies shows that rural school children were more likely than suburban school children to have bus rides of 30 minutes or longer, and that their rides were more arduous, traversing poorer roads and rougher terrain. Rural elementary children were more likely to be placed on buses with middle and high school students. A rural Quebec study found that long bus rides reduced the number and variety of household activities and reduced students' sleep time, recreational time, academic attentiveness, and extracurricular participation. One might theorize that by removing rural children and their activities, rural school busing erodes the "social capital" of rural communities. A 5-state study found that almost all rural children experienced one-way bus rides of more than 30 minutes, and approximately one quarter experienced one-way rides of more than 60 minutes. Another study found that impoverished rural schools had longer rides than more affluent rural schools. Research is needed on the relationship of long rides to student achievement. Given that rural students in impoverished areas confront longer rides, longer rides are a function of larger attendance areas, and smaller size benefits poorer students, it seems unlikely that longer rides constitute an academic benefit for poor students and communities. (Contains 15 references.) (TD)

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ED 459 969

ERIC DIGEST

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EDO-RC-01-7

by

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December 2001

U.S. DEPARTMENT OF EDUCATION
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RC 023 262

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EDO-RC-01-7

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Rural School Busing

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ERIC Educational Resources Information Center

DIGEST

The familiar image of the yellow school bus making its way over a winding country road serves as an emblem of rural education in the United States. At the same time, its nostalgic connotations may contribute to the tendency to accept at face value the centralizing and standardizing agenda that rural school busing enacts. Policymakers and school administrators have routinely attached positive connotations to this agenda—improvement of school conditions, a higher quality of instruction, and robustness of outcomes. But do the projected improvements actually materialize? And, when they do, is there a hidden price tag? This Digest summarizes information that suggests that long bus rides are part of the hidden costs of school and district consolidation.

Historical Context

Even before the 1800s, families in small rural towns began to establish schools so that their children could learn to read and write. For much of the 1800s, these schools were organized informally, provided with little support or supervision from states, and positioned to address community interests and needs. The school year was short and attendance poor. Children, of course, walked to these schools, and many children who lived in the countryside were unable to attend. For many rural children, therefore, instruction—mostly practical in nature—came from parents, nearby relatives, or neighbors.

These circumstances did not, however, mesh well with states' interests in compelling student attendance. Policymakers and education leaders saw considerable value in using the system of common schools to accomplish national political and economic aims. To do so, they were willing to structure schooling in ways that would affect the routines of family life and farm production, at a time when most Americans farmed or lived in the country. As early as the 1880s, policymakers began to call for school consolidation as a way to improve the conditions of rural schools. Without innovations in the mechanics and infrastructure of transportation, however, these proposals had comparatively little impact.

By the 1930s, transportation technologies had caught up with proposals to create new consolidated schools, and the smallest rural schools began to close. Since that time, rural students have been bused to increasingly larger schools, located at greater and greater remove from their homes. In fact, consolidation has cut the number of U.S. school *districts* by 91 percent since about 1930, and the number of *schools* by 67 percent, while the number of *students* has simultaneously increased by 83 percent (Snyder & Hoffman, 2001).

The effect on rural school transportation budgets is seldom appreciated. Today, school districts in rural areas spend more than twice per pupil what urban districts spend on transportation (Killeen & Sipple, 2000, p. 18).

The Experience of Riding the Bus

Despite the fact that for more than half a century generations of rural children have been riding school buses, educators know very little about that experience from the perspective of communities, families, or students. Important questions, however, concern the length of rides experienced by rural students, the effects of those rides on school participation and academic achievement, and the impact of widespread school busing on rural ways of life.

Rural educators, of course, know that many of their students board buses early in the morning and arrive home in the very late afternoon. Still, as Killeen and Sipple (2000) note, "on the national level . . . no data or statistics exist which account for the bus ride time for children" (p. 12). A recent study (Howley, Howley, & Shamblen, 2001), however, provided some rudimentary comparisons between ride times for elementary students in rural and suburban schools. (This study focused on rural and suburban locales because urban districts often make extensive use of public mass-transport systems.) Overall, the study showed that rural schoolchildren were more likely than their suburban counterparts to have bus rides of 30 minutes or longer. Their rides also tended to be more arduous, traversing poorer roads and more hilly or mountainous terrain than those experienced by suburban students. In addition—for good or ill—rural elementary children were quite likely to be "double-routed," an efficiency measure placing them on buses with middle and high school students.

These circumstances may seem to some educators a fair price for rural children to pay in order to derive benefits from larger, more centralized schools. But are there hidden costs? Certainly costs in academic terms would offer serious cause for concern. One of the best studies in the literature (Lu & Tweeten, 1973), now quite dated, confirmed a negative effect of duration of bus rides in Oklahoma on student achievement.[1] In the absence of more recent studies on achievement impacts, the most reasonable basis for evaluating the costs and benefits of long bus rides comes indirectly from research addressing the effects of large scale schools on the achievement of low-socioeconomic-status (SES) students. Findings from this research are relevant because shorter bus rides have been found to be positively associated with smaller school size (Howley et al., 2001). Moreover, attention to the achievement of low-SES students makes particular sense in rural locales, where so many families' incomes fall below the national median (U.S. Department of Commerce, 1998).

An extensive literature on the size of schools and districts, including those in rural communities, speaks quite clearly to the issue of achievement. As this literature shows, smaller size tends to improve the overall achievement of schools and districts serving large proportions of impoverished students (e.g., Bickel & Howley, 2000; Howley & Bickel, 1999). Although these studies use school- and district-level data, they do provide a reasonable basis for making inferences about how well low-income students who attend large, remote schools are likely to perform. And this reasoning leads to the conclusion that such students' academic achievement is likely to suffer. Whether rural students' long bus rides directly contribute to this deleterious outcome, of course, has yet to be shown.

Long bus rides also take students away from their homes and communities for many hours during each school day,

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and this effect on children's lives has been studied in another of the best studies in the literature (Fox, 1996; see also Spence, 2000). In an investigation of rural Quebec families, Fox found that long rides reduced the number and variety of household activities and reduced students' sleep time, recreational time, academic attentiveness, and extracurricular participation. Moreover, Fox found that rural farm families were the ones most seriously inconvenienced, because their schedules were the least adaptable. Fox's assertions, though rare, are not unique. Beaumont and Pianca (2000) report that school busing is part of a set of institutionalized school practices that contribute to the erosion of neighborhood cohesion. "School sprawl" deprives rural and small-town neighborhoods of children and their activities, but the possible harm done to social capital and community cohesion by this removal has not been studied.

Such findings connect to theories of social coherence and resourcefulness. For instance, the decision to close small local schools restricts rural residents' engagement with and support for schools (e.g., Spence, 2000). Moreover, when the two major institutions of socialization—the family and the school—are at odds, community integration and the well-being of community members tend to suffer (e.g., Peshkin, 1982). One might well theorize that rural school busing erodes the "social capital" of rural communities (cf. Coleman, 1988; Putnam, 1993).

Clearly, school closure, school size, and length of bus ride are complexly related issues. But, with an insufficient research base, their separate and combined effects are difficult to pinpoint. Important as these dynamics may be, moreover, they are somewhat removed from the direct experience of rural students who ride school buses. What, then, in more concrete terms, is that experience like?

The Rural Bus Ride

A preliminary picture of the rural school bus ride has been provided in a recent study by Howley (2001). Based on a five-state survey of elementary school principals, the researcher discovered that most rural children experience rides of excessive length. Whereas almost all such children (85 percent) experience one-way bus rides of more than 30 minutes, approximately one quarter of them experience one-way rides of more than 60 minutes.

Not only do long bus rides extend the length of the school day for many rural children, so too do long wait times at school (i.e., before the start of and after the conclusion of the instructional day). On average, the morning wait time for rural students in the responding schools was an estimated 14 minutes. Their average afternoon wait time was 13 minutes.

Rural students also travel to school over relatively rough roads. Although there is considerable variation by state, approximately 36 percent of rural bus routes traverse paved major roads, about 43 percent paved minor roads, and about 20 percent unpaved minor roads. Moreover, in many rural locales, sizable proportions of the roads used to transport children cross hilly and even mountainous terrain.

Given the challenging bus rides that rural students face, many districts appear to be taking steps to ensure the safety and effectiveness of their transportation systems. Approximately 50 percent of rural districts employ a full-time transportation director. Sixty-nine percent provide regular first-aid instruction to bus drivers, and about 77 percent equip all of their buses with two-way communication devices.

Policy, Research, and Practice Issues

The effect of the school bus on schooling is likely to be as profound as the effect of the automobile on shopping. Extant literature strongly suggests that more is at stake in rural school busing than cost efficiency and safety. Rural and suburban differences exist widely, but one study (Howley, 2001) documented widespread differences by social class and ethnicity in the *rural* bus ride (e.g., impoverished rural schools have longer rides than more affluent rural schools). Clearly, busing is not a neutral part of the school day, but exhibits instead the systemic contradictions and complexities that structure American society generally.

Studies into the influence of length of bus ride are sorely needed, particularly into the relationship of long rides to student achievement (or, more broadly, school performance) and to levels of, or the experience of, parental involvement. Lu and Tweeten's unreplicated study of the effect that riding the bus has on student achievement, clearly the best in the extant literature, remains an incentive for further study.

In the meantime, community members, school administrators, and policymakers can begin to connect the findings about length of ride to those on the effects of smaller school and district size. Three facts—that (1) rural students in impoverished areas confront longer rides, (2) longer rides are a function of larger attendance areas, and (3) smaller size benefits lower-SES students—are significant, taken together. It seems unlikely that longer rides constitute an academic benefit for poor students and communities.

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[1]Another study from the 1970s (Thibeault, Zetler, & Wilson, 1977) found no such effect in Montana; however, this study has several methodological flaws, rendering it inconclusive in this discussion.

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This publication was prepared with funding from the Office of Educational Research and Improvement, U.S. Department of Education, under contract no. ED-99-CO-0027. The opinions expressed herein do not necessarily reflect the positions or policies of OERI, the Department, or AEL.

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